

AMENDMENTS TO THE SPECIFICATION

Please replace the paragraph at page 2, line 16, with the following rewritten paragraph:

Non-Patent Document 2: B. Jalali et al., "Optical folding-flash analog-to-digital converter with analog encoding", Optical-Optics Letters, Optical Society of America, Vol. 20, No. 18, September 15, 1995.

Please replace the paragraph at page 2, line 19, with the following rewritten paragraph:

Non-Patent Document 3: N. J. Doran et al., "Nonlinear-optical loop mirror", Optical Letters, Optical-Optics Society of America, Vol. 13, No. 1, January 1988.

Please replace the paragraph at page 2, line 22, with the following rewritten paragraph:

Non-Patent Document 4: Takashi Yamamoto et al., "Demultiplexing of ~~Sub-Tera-bit subterabit~~ TDM ~~optical-signal by using ultrafast~~ with a super-high-speed nonlinear optical loop mirror", Technical Report of the Institute of Electronics Information and Communication Engineers, C-I, issued from the Institute of Electronics Information and Communication Engineers, Vol. J82-C-1, pp. 109-116, March 1999.

Please replace the paragraph at page 2, line 28, with the following rewritten paragraph:

Non-Patent Document 5: Govind P. Agrawal, "NONLINEAR FIBER OPTICS", Academic Press, ISBN: 012045142533, 2nd3rd Edition, pp. 210-211, 1995January 15, 2001.

Please replace the paragraph at page 3, line 1, with the following rewritten paragraph:

Non-Patent Document 6: Stephen M. Jensen, "The Nonlinear Coherent Coupler", IEEE Journal of Quantum Electronics~~Electrics~~, Vol. QE-18, No. 10, October 1982.